

Chiral symmetry at high energies

I will present two new applications of effective field theory.

The first one is the predictions of chiral logarithms for processes at high energy with socalled hard pion Chiral perturbation theory. This allows e.g. to make predictions for the light quark mass dependence of semileptonic form-factors in heavy quark decays also away from the endpoint [arXiv:0906.0302, 1006.1197, 1011.6531, 1109.5033]

The second application is an extension of chiral perturbation theory methods to effective field theories with a different pattern of global symmetry breaking. These results are expected to be useful for lattice studies of technicolour related theories. [arXiv:0910.5424, 1102.0172, 1111.1886]

Author: Prof. BIJNENS, Bijnens (Lund University)

Presenter: Prof. BIJNENS, Bijnens (Lund University)